

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Atty. Docket: NL 030968

MARK THOMAS JOHNSON ET AL.

Confirmation No. 4579

Serial No. 10/568,644

Examiner: Keith L. CRAWLEY

Filed: FEBRUARY 16, 2006

Group Art Unit: 2629

Title: ELECTROPHORETIC DISPLAY PANEL

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF

Sir:

Appellants herewith respectfully present its Reply Brief as follows:

ARGUMENT/REMARKS

The Examiner's Answer on page 17 has raised a new issue with regard to claims 1, 11 and 20 having informalities in that the terms "said extreme positions" and "the other one of the extreme positions" have a lack of antecedence basis in the claims. An amendment after final action addressing the informalities noted in the Examiner's Answer is submitted concurrent with the filing of this Reply Brief. As these informalities have nothing to do with the substantive rejection of the claims with regard to U.S. Patent No. 7,012,600 to Zehner ("Zehner") nor U.S. Patent No. 7,176,880 to Amundson ("Amundson") and are corrected by the submitted amendment after final action, it will not be discussed further herein.

With regard to the substantive rejection of the claims, in a Response to Arguments section of the Examiner's Answer contained on page 15 of the Examiner's Answer, a position is taken that Zehner supports (emphasis added) "each preset potential difference representing a preset energy sufficient to release particles present in one of said extreme positions from their position but insufficient to enable said particles to reach the other one of the extreme positions" as recited in the claims.

This assertion contained in the Examiner's Answer is respectfully traversed.

It is respectfully submitted that the position taken in the Examiner's Answer is in direct contrast to the explicit teachings of Zehner which teaches away from each preset potential difference representing a preset energy sufficient to release particles present in one of said extreme positions from their position but insufficient to enable said particles to reach the other one of the extreme positions.

It is respectfully submitted that Zehner is clear that (emphasis added):

Prepulse slide show waveforms can be divided into two basic forms, those with an odd number of prepulses, and those with an even number of prepulses. For the odd-prepulse case, the erasing pulse may be equal in impulse and opposite in polarity to the immediately previous writing pulse (again, see FIG. 9 and discussion thereof below). In other words, if the pixel is written to gray from black, the erasing pulse will take the pixel back to the black state. In the even-prepulse case, the erasing pulse should be of the same polarity as the previous writing pulse, and the sum of the impulses of the previous writing pulse and the erasing pulse should be equal to the impulse necessary to fully transition from black to white. In other words, if a pixel is written from black in the even-prepulse case, then it must be erased to white. (See, Zehner, Col. 28, lines 23-37.)

In other words, Zehner is clear that at least one of the prepulses (in fact the prepulse immediately preceding the driving pulse with image information) must transition to one of the extreme states which is in marked contrast to the assertions contained in the Examiner's Answer that Zehner teaches that each of the prepulses of Zehner be insufficient to enable the particles to reach one of the two extreme states.

In further contrast to what is asserted by the Examiner's Answer, Zehner is clear that (emphasis added) "[e]xamination of either the even or odd form of the uncompensated n-prepulse slide show waveform will reveal that the writing pulse always begins from the same direction, i.e. either from black or from white. This is an important feature of this waveform. Since the principle of the uncompensated waveform is that the pulse length can not be compensated accurately to ensure that pixels reach the same optical state, one cannot to expect to reach an identical optical state when approaching from opposite extreme optical states (black or white). Accordingly, there are two possible, polarities for either of these forms, which can be labeled 'from black' and 'from white.'" (See, Zehner, Col. 28, line 58 through Col. 29, line 2.)

In other words and as explicitly clear from Zehner, Zehner teaches that the prepulses leave the display in either a black or white state (one of the extreme states) prior to application of the driving pulse with image information. Accordingly, whether or not all of the pulses drive the display to an extreme state is immaterial since it is clear that Zehner teaches that at least one of the prepulses, drive the display to one of the extreme states prior to application of a driving pulse of image information.

It is respectfully submitted that in contrast with the assertion contained in the Examiner's Answer, there is no suggestion to modify a prior art reference where the modification would render the device inoperable for its intended purpose. (In re Gordon, 733 F.2d 900 (Fed. Cir. 1984))

Zehner is clear that the prepulses must drive the display to one of the extreme positions prior to application of the image information to the display. As such, it is clear that Zehner does not teach, disclose or suggest (emphasis added) "each preset potential difference representing a preset energy sufficient to release particles present in one of said extreme positions from their position but insufficient to enable said particles to reach

the other one of the extreme positions" as substantially recited in each of claims 1, 11 and 20.

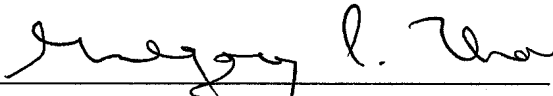
In fact Zehner teaches away from this in stating that at least one of the prepulses must drive the display to one of the extreme states and in fact, Zehner is clear that the pulse immediately preceding the driving pulse with image information must drive the display to one of the extreme states (see detailed discussion above).

Based on the foregoing, it is respectfully submitted that claims 1, 11 and 20 are allowable over Zehner. Amundson is cited for allegedly showing elements of the dependent claim yet does not cure the deficiencies Zehner. Accordingly, it is respectfully requested that the rejection of claims 1, 11 and 20 be reversed. Claims 2-9 and 13-18 respectively depend from one of claims 1 and 11 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of said claims. Accordingly, reversal of the rejection of claims 2-9 and 13-18 is respectfully requested.

CONCLUSION

Claims 1-9, 11, 13-18 and 20-22 are patentable over Zehner alone and in view of Amundson. Thus the Examiner's rejection of claims 1-9, 11, 13-18 and 20-22 should be reversed.

Respectfully submitted,

By 
Gregory L. Thorne, Reg. 39,398
Attorney for Appellants
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THORNE & HALAJIAN, LLP
Applied Technology Center
111 West Main Street
Bay Shore, NY 11706
Tel: (631) 665-5139
Fax: (631) 665-5101

Please direct all inquiries and correspondence to:

Michael E. Belk, Reg. 33,357
Philips Intellectual Property & Standards
P.O. Box 3001
Briarcliff Manor, NY 10510-8001
(914) 333-9643